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UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

A34807

First Inventor

Sung Soo Ahn

Title

SIGNAL

\* see attached

Express Mail Label No.

EF321679975US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 18]  
(preferred arrangement set forth below)
- Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
- ☒ Claim(s) [Total Sheets 9]
- ☒ Abstract of the Disclosure [Total Sheets 1]
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 3]
5. Oath or Declaration [Total Pages 3]
- a. ☒ Newly executed (original or copy)
- b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
- i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b)
6. ☐ Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Assistant Commissioner for Patent  
Box Patent Application  
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
  - ii. ☐ paper
- c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No: .....

Prior application information. Examiner .....

Group Art Unit: .....

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS



Customer Number or Bar Code Label

21003

(Insert Customer No. or Attach bar code label here)

or ☐

Correspondence address below

Name

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Ronald B. Hildreth

Registration No. (Attorney/Agent)

19,498

Signature

Date

11-14-01

# FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$ 864

## Complete if Known

Application Number  
Filing Date  
First Named Inventor Sung Soo Ahn  
Examiner Name  
Group Art Unit  
Attorney Docket No. A34807

## METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number 02-4377  
Deposit Account Name Baker Botts LLP

- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee (\$)	Small Entity Fee (\$)	Fee Description	Fee Paid
740	370	Utility filing fee	740
330	165	Design filing fee	
510	255	Plant filing fee	
740	370	Reissue filing fee	
160	80	Provisional filing fee	

SUBTOTAL (1) (\$ 740

### 2. EXTRA CLAIM FEES

Total Claims 17 - 20 \*\* = 0 x Fee from below = 0  
Independent Claims 4 - 3 \*\* = 1 x 84 = 84  
Multiple Dependent Claims =

Large Entity Fee (\$)	Small Entity Fee (\$)	Fee Description
18	9	Claims in excess of 20
84	42	Independent claims in excess of 3
280	140	Multiple dependent claim, if not paid
84	42	** Reissue independent claims over original patent
18	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 84

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee (\$)	Small Entity Fee (\$)	Fee Description	Fee Paid
130	65	Surcharge - late filing fee or oath	
50	25	Surcharge - late provisional filing fee or cover sheet	
130	130	Non-English specification	
2,520	2,520	For filing a request for ex parte reexamination	
920*	920*	Requesting publication of SIR prior to Examiner action	
1,840*	1,840*	Requesting publication of SIR after Examiner action	
110	55	Extension for reply within first month	
400	200	Extension for reply within second month	
920	460	Extension for reply within third month	
1,440	720	Extension for reply within fourth month	
1,960	980	Extension for reply within fifth month	
320	160	Notice of Appeal	
320	160	Filing a brief in support of an appeal	
280	140	Request for oral hearing	
1,510	1,510	Petition to institute a public use proceeding	
110	55	Petition to revive - unavoidable	
1,280	640	Petition to revive - unintentional	
1,280	640	Utility issue fee (or reissue)	
460	230	Design issue fee	
620	310	Plant issue fee	
130	130	Petitions to the Commissioner	
50	50	Processing fee under 37 CFR 1.17(q)	
180	180	Submission of Information Disclosure Stmt	
40	40	Recording each patent assignment per property (times number of properties)	40
740	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
740	370	For each additional invention to be examined (37 CFR § 1.129(b))	
740	370	Request for Continued Examination (RCE)	
900	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40

## SUBMITTED BY

Name (Print/Type) Ronald B. Hildreth  
Signature

Registration No (Attorney/Agent) 19,498

## Complete (if applicable)

Telephone 212-408-2544  
Date 11-14-01

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**Addendum Sheet 1**

## \*Question 4 Addendum

4.a. Drawings are ☒ formal ☐ informal

## \* Question 5 Addendum

5.c. ☐ An unsigned oath or declaration is included.

## \* Question 8 Addendum

8.d. ☐ A sequence submission will follow.

## \* Question 9 Addendum

9.a. ☐ Assignment documents will follow.9.b. ☐ Assignment documents have been filed in  
parent application No.

## \* Question 11 Addendum

11.a. ☐ English translation will follow.

## \* Question 12 Addendum

12.a. ☐ Copies of IDS citations will follow.

## \* Question 15 Addendum

15.a. ☒ Certified copies of priority documents will follow.15.b. ☐ Certified copies of priority documents have been filed in parent  
application No.

Use the space below for additional information

Inventors - Sung Soo Ahn and Seung Won Choi

Title (continued):

SIGNAL PROCESSING METHOD AND APPARATUS FOR ENHANCING DEMODULATION  
PERFORMANCE OF CDMA RECEIVING SYSTEM UTILIZING ARRAY ANTENNA

## Addendum Sheet 2

18a. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation☐ Divisional☐ Continuation-in-part (CIP)

of prior application No.: \_\_\_\_\_

Prior application information:

Examiner \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

18b. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation☐ Divisional☐ Continuation-in-part (CIP)

of prior application No.: \_\_\_\_\_

Prior application information:

Examiner \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

18c. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation☐ Divisional☐ Continuation-in-part (CIP)

of prior application No.: \_\_\_\_\_

Prior application information:

Examiner \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

☐ Amend the specification by inserting before the first line the sentence(s)☐ "This application is a ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of:☐ "This application is based upon:

prior application No.:

, incorporated by reference herein,

☐ which is a☐ Continuation☐ Divisional☐ Continuation-in-part (CIP) of:☐ which is based upon:

prior application No.

, incorporated by reference herein,

☐ which is a☐ Continuation☐ Divisional☐ Continuation-in-part (CIP) of:☐ which is based upon:

prior application No.:

, incorporated by reference herein,

☐ which is a☐ Continuation☐ Divisional☐ Continuation-in-part (CIP) of:☐ which is based upon:

prior application No.:

, incorporated by reference herein,

☐ which is a☐ Continuation☐ Divisional☐ Continuation-in-part (CIP) of:☐ which is based upon:

prior application No.

, incorporated by reference herein,

☐ which is a☐ Continuation☐ Divisional☐ Continuation-in-part (CIP) of:☐ which is based upon:

prior application No.

, incorporated by reference herein

Priority under 35 U.S.C. §119 is claimed based upon the following applications.

## Foreign Applications:

Country: Republic of KoreaSerial No: 2001-14468Filing Date: Mar. 20, 2001

Country: \_\_\_\_\_

Serial No: \_\_\_\_\_

Filing Date: \_\_\_\_\_

Country: \_\_\_\_\_

Serial No: \_\_\_\_\_

Filing Date: \_\_\_\_\_

## Provisional Applications:

Serial No: \_\_\_\_\_

Filing Date: \_\_\_\_\_

Serial No: \_\_\_\_\_

Filing Date: \_\_\_\_\_

Serial No: \_\_\_\_\_

Filing Date: \_\_\_\_\_

**CERTIFICATION UNDER 37 C.F.R. 1.8(a) OR 1.10\***

*(When using Express Mail, the Express Mail label number is mandatory; Express Mail Certification is optional.)*

I hereby certify that, on the date shown below, this correspondence is being:

**MAILING**

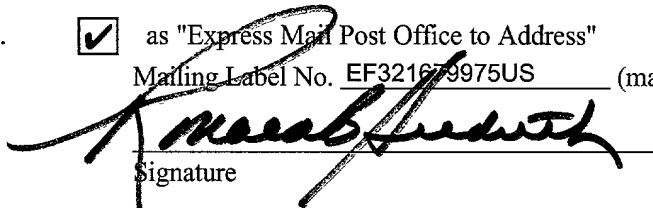
- ☒ deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner for Patents, Washington D.C. 20231.

**37 C.F.R. 1.8(a)**

- ☐ with sufficient postage as first class mail.

**37 C.F.R. 1.10\***

- ☒ as "Express Mail Post Office to Address"  
Mailing Label No. EF321679975US (mandatory)

  
Signature

Date: November 14, 2001

Ronald B. Hildreth, PTO#19,498

*(type or print name of person certifying)*

**\*WARNING:** Each paper of fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing 37 C.F.R. 1.10(b).  
"Since the filing of correspondence under § 1.10 without the Express Mail label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition. "Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.